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Summary Report

2004

Washington State Department of
Agriculture
Plant Protection Division



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Asian Gypsy Moth (AGM) Survey:

Detection

A waterway survey was conducted with traps stretching from the B.C. border, down into Puget Sound, along the Pacific Coast and up the Columbia River thru Klickitat County at four traps per linear mile. In addition, port surveys were conducted using a density of nine traps per square mile for a radius of one mile, and four traps per square mile for an additional two-mile radius. Two exceptions were the high-risk Ports of Tacoma and Seattle, which were trapped at a density of twenty-five traps per square mile for a two-mile radius, and sixteen traps per square mile for an additional three-mile radius. In 2004, a total of 5,928 AGM detection port and waterway traps were placed.

Delimiting

There have not been any Asian gypsy moths trapped in Washington State since the summer of 1999. No Asian gypsy moth delimiting traps were placed during the summer 2004 gypsy moth survey.

European Gypsy Moth (EGM) Survey:

Detection

Washington State was surveyed at the density of one trap per square mile to detect European gypsy moth (EGM) introductions. A total of 11,146 traps were placed during the 2004 survey season.

Delimiting

Delimiting survey grids were placed in twenty-six catch areas from 2002 and 2003 with nineteen new catch sites added during 2004. Prior year single moth catch sites received twenty-five traps per square mile for a radius of one mile. Prior year multiple moth catch sites received sixty-four traps per square mile for a radius of one mile. A total of 4,690 EGM delimiting traps were placed.

Traps

A total of 21,764 gypsy moth traps were placed in Washington State during the summer of 2004. Of these 21,764 traps, 17,074 were for detection and 4,690 were for delimiting traps (see Table 5).

Moths

Sixty-eight gypsy moths were caught in 2004 and all were of the European variety. All moths were caught in western Washington and none in eastern Washington.

Twenty-four catch areas were recorded in 2004 (see Table 1).

Fifteen of the 2004 catch areas were single-moth sites.

Twelve of the fifteen 2003 catch areas did not repeat in 2004 (see Table 4).

One catch area from 2002 that did not repeat in 2003 did catch again in 2004.

History

Table 1. GM 12 Year Catch History

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Total Catch Areas	54	35	40	26	26	17	15	12	15	15	17	24
New Catch Areas	33	20	20	18	16	9	12	8	11	11	11	18
Moths	201	173	149	91	69	53	42	92	33	17	59	68
Moths/Area	3.7	4.9	3.7	3.5	2.6	3.1	2.8	7.7	2.2	1.1	3.5	2.8
Traps	29,059	15,908	36,166	31,668	25,185	20,230	21,498	21,834	22,046	18,698	21,633	21,764

Catch Areas

Eighteen new catch areas were recorded in 2004 with the following number of moth catches in each:

- Clark Co. Skye (1)
- Island Co. Coupeville (1), Deception Pass (1)
- King Co. Georgetown (3), Madrona Park (6), Ravenna (4), Samamish (1),
Union Hill (1)
- Kitsap Co. Fairview (2)
- Mason Co. Belfair (1)
- Pierce Co. Fredrickson (1), Port of Tacoma (1), Spanaway (1)
- San Juan Co. San Juan Island (1), Shaw Island (9)
- Snohomish Co. Maltby (1), Marysville (2)
- Whatcom Co. Squalicum (1)

Eradication

2002

The Crown Hill eradication site was treated three times with Btk (Foray 48B). The Crown Hill site was treated using ground based equipment. A declaration of eradication requires two consecutive years of negative trap data. During the summer of 2002 there were no gypsy moths trapped in Crown hill site. During the summer of 2003 there was one gypsy moth trapped near the Crown Hill site. During the summer of 2004 there were no gypsy moth trapped in the Crown Hill site.

2003

WSDA did not have any gypsy moth eradication sites in 2003.

2004

During the spring of 2004 the Port Ludlow, Bellevue, and Mayfield sites were treated three times with Btk (Foray 48B). All treatments were conducted by WSDA using ground based equipment. During the summer of 2004 there was one gypsy moth trapped near the Mayfield site. For acreage treated see Table 2.

Table 2. 2004 Gypsy Moth Eradication Sites

County	Site	Acres	Method	Treatment
Jefferson	Port Ludlow	12	H	Btk
King	Bellevue	11	H	Btk
Lewis	Mayfield	7.5	H	Btk
	Total Acreage	30.5		

Method: A-aerial, H-hydraulic, R-rotomist, M-mass trapping

Treatment: Btk-*Bacillus thuringiensis kurstaki*

2005

WSDA is proposing eradication of two EGM areas in 2005 (see table 3).

Table 3. Proposed 2005 Gypsy Moth Eradication Sites

County	Site	Acres
King	Roanoke	12
Kitsap	Evergreen Ridge	160

Table 4. 2002 - 2004 W.S.D.A Gypsy Moth Survey Results

County		Catch Area	2002		2003		2004		Control Actions
			Total Catch	No. Trap Sites	Total Catch	No. Trap Sites	Total Catch	No. Trap Sites	
CLARK	✖✖	Skye	---	---	---	---	1	1	
ISLAND	✖✖	Coupeville	---	---	---	---	1	1	
	✖✖	Deception Pass	---	---	---	---	1	1	
JEFFERSON		Port Ludlow	---	---	14	12	0	0	'04 (\$) Port Ludlow
KING		Bellevue	1	1	1	1	0	0	'04 (\$) Bellevue '02 (\$) Crown Hill
"		Bellevue South	---	---	17	13	0	0	
"		Crown Hill	0	0	1	1	0	0	
"		Des Moines	1	1	0	0	0	0	
"		Factoria	1	1	0	0	1	1	
"		Flaming Geyser	---	---	1	1	0	0	
"		Fort Dent	---	---	1	1	0	0	
"	✖✖	Georgetown	---	---	---	---	3	2	
"	✖✖	Madrona Park	---	---	---	---	6	4	
"		Mercer Island	1	1	0	0	0	0	
"		Newcastle	---	---	1	1	0	0	
"		Newport Hills	1	1	1	1	0	0	
"		North Factoria	1	1	0	0	0	0	
"		Preston	---	---	1	1	0	0	
"	✖✖	Ravenna	---	---	---	---	4	4	
"		Roanoke	---	---	5	5	5	4	
"		Rosemont	---	---	1	1	0	0	
"		Sahalee	1	1	1	1	0	0	
"	✖✖	Samamish	---	---	---	---	1	1	
"	✖✖	Union Hill	---	---	---	---	1	1	
KITSAP		Bainbridge Island	1	1	1	1	1	1	
"		Evergreen Ridge	---	---	1	1	20	5	
"	✖✖	Fairview	---	---	---	---	2	2	
LEWIS/COWLITZ		Mayfield	---	---	8	1	1	1	'04 (\$) Mayfield
"		Napavine	1	1	0	0	0	0	
MASON	✖✖	Belfair	---	---	---	---	1	1	
PIERCE	✖✖	Fredrickson	---	---	---	---	1	1	
"		Pioneer	1	1	3	3	2	2	
"	✖✖	Port of Tacoma	---	---	---	---	1	1	
"	✖✖	Spanaway	---	---	---	---	1	1	
SAN JUAN	✖✖	San Juan Island	---	---	---	---	1	1	
"	✖✖	Shaw Island	---	---	---	---	9	2	
SKAGIT		Concrete	---	---	1	1	0	0	
SNOHOMISH	✖✖	Maltby	---	---	---	---	1	1	
"	✖✖	Marysville	---	---	---	---	2	2	
WHATCOM		Bellingham	1	1	0	0	0	0	
"		Bellingham Port	4	2	0	0	0	0	
"		Ferndale	1	1	0	0	0	0	
"	✖✖	Squalicum	---	---	---	---	1	1	
		Totals	17	15	59	46	68	42	

(#) Bt (Aerial)

(\$) Bt (Ground Spray)

(---) Pre-catch

✖✖ New Site 2004

Table 5. 2004 Washington State Gypsy Moth Program Trap Deployment

County	4/lin mi	4/sq mi	9/sq mi	16/sq mi	25/sq mi	AGM Total	1/sq mi	25/sq mi	50/sq mi	64/sq mi	EGM Total	G. Total
Adams						0	24				24	24
Asotin						0	24				24	24
Benton						0	102				102	102
Chelan						0	277				277	277
Clallam	426	87	35			548	237				237	785
Clark	163	75	40			278	532	156			688	966
Columbia						0	15				15	15
Cowlitz	96	127	83			306	336				336	642
Douglas						0	41				41	41
Ferry						0	100				100	100
Franklin						0	54				54	54
Garfield						0	11				11	11
Grant						0	76				76	76
Grays Harbor	251	64	56			371	424				424	795
Island	199					199	398	25			423	622
Jefferson	116	97	42			255	282			131	413	668
King	251			540	372	1,163	1,053	1,890	122	872	3,937	5,100
Kitsap	209					209	292	236	133		661	870
Kittitas						0	46				46	46
Klickitat	86					86	228				228	314
Lewis						0	933	36	142		1,111	1,111
Lincoln						0	45				45	45
Mason	29					29	540	40			580	609
Okanogan						0	237				237	237
Pacific	301					301	150				150	451
Pend Oreille						0	71				71	71
Pierce	182			356	209	747	1,130	65	438		1,633	2,380
San Juan	80					80	68				68	148
Skagit	108	55	33			196	500	54			554	750
Skamania	103					103	304	22			326	429
Snohomish	63	85	36			184	780		101		881	1,065
Spokane						0	302				302	302
Stevens						0	105				105	105
Thurston	292	138	40			470	349				349	819
Wahkiakum	120					120	72				72	192
Walla Walla						0	86				86	86
Whatcom	87	196				283	649	124		103	876	1,159
Whitman						0	51				51	51
Yakima						0	222				222	222
Totals	3,162	924	365	896	581	5,928	11,146	2,648	936	1,106	15,836	21,764

2004 Gypsy Moth Catch Sites in Washington State

